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Seattle, WA 98103
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Landau Associates
Piper Roelen
130 2nd Ave South
Edmonds, Washington 98020

RE: Heavens Supply
Lab ID: 1312093

December 13, 2013

Attention Piper Roelen:

Fremont Analytical, Inc. received 2 sample(s) on 12/11/2013 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee
Sr. Chemist / Principal

CC:
Ann Halvorsen
Martin Valeri



Date: 12/13/2013

CLIENT: Landau Associates
Project: Heavens Supply
Lab Order: 1312093

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1312093-001	VP-2:121113	12/11/2013 1:18 PM	12/11/2013 2:27 PM
1312093-002	VP-1:121113	12/11/2013 1:26 PM	12/11/2013 2:27 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



Case Narrative

WO#: 1312093

Date: 12/13/2013

CLIENT: Landau Associates

Project: Heavens Supply

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



Client: Landau Associates

WorkOrder: 1312093

Project: Heavens Supply

Client Sample ID: VP-2:121113

Date Sampled: 12/11/2013

Lab ID: 1312093-001A

Date Received: 12/11/2013

Sample Type: Tedlar Bag

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)			

Volatile Organic Compounds by EPA Method TO-15

cis-1,2-Dichloroethene	<1.60	<6.34	1.60	6.34		TO-15	12/12/2013	SG
Tetrachloroethene (PCE)	<2.40	<16.3	2.40	16.3		TO-15	12/12/2013	SG
Trichloroethene (TCE)	<1.60	<8.60	1.60	8.60		TO-15	12/12/2013	SG
Vinyl chloride	<1.60	<4.09	1.60	4.09		TO-15	12/12/2013	SG
Surr: 4-Bromofluorobenzene	104 %Rec	--	70-130	--		TO-15	12/12/2013	SG

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits

D Dilution was required
H Holding times for preparation or analysis exceeded
ND Not detected at the Reporting Limit



Client: Landau Associates

WorkOrder: 1312093

Project: Heavens Supply

Client Sample ID: VP-1:121113

Date Sampled: 12/11/2013

Lab ID: 1312093-002A

Date Received: 12/11/2013

Sample Type: Tedlar Bag

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst
	(ppbv)	(ug/m ³)	(ppbv)	(ug/m ³)			

Volatile Organic Compounds by EPA Method TO-15

cis-1,2-Dichloroethene	<1.60	<6.34	1.60	6.34		TO-15	12/12/2013	SG
Tetrachloroethene (PCE)	2.72	18.5	2.40	16.3		TO-15	12/12/2013	SG
Trichloroethene (TCE)	<1.60	<8.60	1.60	8.60		TO-15	12/12/2013	SG
Vinyl chloride	<1.60	<4.09	1.60	4.09		TO-15	12/12/2013	SG
Surr: 4-Bromofluorobenzene	103 %Rec	--	70-130	--		TO-15	12/12/2013	SG

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit



Date: 12/13/2013

Work Order: 1312093
CLIENT: Landau Associates
Project: Heavens Supply

QC SUMMARY REPORT**Volatile Organic Compounds by EPA Method TO-15**

Sample ID: 1312096-001BREP	SampType: REP	Units: ppbv			Prep Date: 12/12/2013			RunNo: 11579			
Client ID: BATCH	Batch ID: R11579				Analysis Date: 12/12/2013			SeqNo: 231800			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.60						0		30	
cis-1,2-Dichloroethene	ND	1.60						0		30	
Trichloroethene (TCE)	ND	1.60						0		30	
Tetrachloroethene (PCE)	ND	2.40						0		30	
Surr: 4-Bromofluorobenzene	10.2		80.00		12.8	70	130		0		S

Sample ID: LCS-R11579	SampType: LCS	Units: ppbv				Prep Date: 12/12/2013			RunNo: 11579		
Client ID: LCSW	Batch ID: R11579					Analysis Date: 12/12/2013			SeqNo: 231801		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	3.81	0.200	5.000	0	76.2	70	130				
cis-1,2-Dichloroethene	3.87	0.200	5.000	0	77.4	70	130				
Trichloroethene (TCE)	5.72	0.200	5.000	0	114	70	130				
Tetrachloroethene (PCE)	5.80	0.300	5.000	0	116	70	130				
Surr: 4-Bromofluorobenzene	10.6		10.00		106	70	130				

Sample ID: MB-R11579	SampType: MBLK	Units: ppbv			Prep Date: 12/12/2013			RunNo: 11579			
Client ID: MBLKW	Batch ID: R11579				Analysis Date: 12/12/2013			SeqNo: 231803			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.200									
cis-1,2-Dichloroethene	ND	0.200									
Trichloroethene (TCE)	ND	0.200									
Tetrachloroethene (PCE)	ND	0.300									
Surr: 4-Bromofluorobenzene	10.3		10.00		103	70	130				

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

D Dilution was required
J Analyte detected below quantitation limits
RL Reporting Limit

E Value above quantitation range
ND Not detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

Sample Log-In Check List

Client Name: **LA**
 Logged by: **Clare Griggs**

Work Order Number: **1312093**
 Date Received: **12/11/2013 2:27:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☐ No ☒ NA ☐
Air Samples
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Required ☒
 6. Was an attempt made to cool the samples? Yes ☐ No ☐ NA ☒
 7. Were all coolers received at a temperature of >0°C to 10.0°C? Yes ☐ No ☐ NA ☒
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
 12. Is the headspace in the VOA vials? Yes ☐ No ☐ NA ☒
 13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐
 14. Does paperwork match bottle labels? Yes ☒ No ☐
 15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
 16. Is it clear what analyses were requested? Yes ☒ No ☐
 17. Were all holding times able to be met? Yes ☒ No ☐

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

☐ **Tacoma** (253) 926-2493
☐ **Spokane** (509) 327-9737
☐ **Portland** (503) 542-1080
☐



**LANDAU
ASSOCIATES**

Chain-of-Custody Record

Date 12/11/13
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